

Global Geospatial Information Management and Marine Spatial Data Infrastructures



In 2009, the MSDIWG completed a guidance document – IHO Publication C-17 – Spatial Data Infrastructures: 'The Marine Dimension' - Guidance for Hydrographic Offices. C-17 provides general information to assist HOs and other authorities in the identification and implementation of their roles in national SDI.

The next stage of activity for the MSDIWG is to propose ways for HOs to implement MSDI - using examples where this is already happening successfully.

The MSDIWG is studying the technical, organisational, policy, educational and scientific aspects of MSDI and has identified a number of challenges and opportunities that exist for HOs, together with the role that they can play in supporting socio-economic development

worldwide.

Key challenges identified for the IHO include:

- supporting how IHO Member States can adapt to new ways of working
- sharing existing knowledge and experience across the HO community
- making the case for MSDI.

MSDI developments fit well with national, regional and world-wide initiatives aiming at supporting environmental policies. Although SDI developments are led by the land mapping and cadastral agencies in most countries, the maritime dimension is increasingly acknowledged as an important element, especially to implement integrated maritime policies.

The results of a recent survey on MSDI conducted among HOs by the MSDIWG revealed that the dominant issues facing HOs are to identify responsibilities for MSDI development, clarify user needs across the relevant sectors, data interoperability, harmonisation and standardisation, and not least - funding. Data interoperability, harmonisation and standardisation is addressed by the new series of IHO standards based on S-100, the Universal Hydrographic Data Model.

In parallel with the work of the MSDIWG, the IHO, as an accredited Observer at the United Nations and a participant of the UN Committee of Experts on Global Geospatial Information Management (GGIM) is contributing to the standardisation of global geospatial data and also the development of a UN sponsored Global Map for Sustainable Development. These UN initiatives give further weight to the need for the IHO and its Member States to develop their roles in MSDI as a significant supporting element of SDI.

The HO engagement in SDI creates greater appreciation of the value of hydrographic information and will favour its wider use in new products and services, improved decision making (such as integrated coastal zone management, disaster mitigation and climate change adaptation). Efficiencies will be gained with the 'measure once use many times' principle. At the same time, MSDI developments expand the need for reliable, high-density source data.

The next MSDIWG meeting, to be associated with a second MSDI Forum, has been planned for February 2014, most likely in North America.